



**DEENDAYAL PORT AUTHORITY**  
**ISO 9001-2015 & ISO 14001-2015**



Office of the Chief Mechanical Engineer  
Room No.315, Annex Administrative  
Building, Gandhidham, Kutch, Pin  
370201  
Email: [cme@deendayalport.gov.in](mailto:cme@deendayalport.gov.in)  
[see@deendayalport.gov.in](mailto:see@deendayalport.gov.in)

No. MS/WK/4050-II/Gim-

Date: 12.09.2024

## EXPRESSION OF INTEREST

**Subject:** “Appointment of Independent Engineer for the work of “Development, Operation & Maintenance of Berth No. 13 for Handling Multipurpose Clean Cargo including Container Cargo at Deendayal Port on DBFOT basis under PPP Mode”- **Call for Expression of Interest along with Budgetary Offer from Indian Ports Association Empanelment list for Independent Engineer - reg.**

Sir,

Deendayal Port Authority intends to appoint Independent Engineer for the work of "Development, Operation & Maintenance of Berth No.13 for handling Multipurpose Clean Cargo including Container Cargo at Deendayal Port on DBFOT basis under PPP mode" for a Concession Period of 30 Years.

Kindly submit your **Expression of Interest** along with budgetary-offer (as per Annexure-I) for the period commencing from the Date of Award of Concession to the date of expiry of 6 (six) months from the COD for the subject work on the basis of Brief Summary & tentative scope of work along with relevant enclosure of Concession Agreement as Annexure -III.

The rates quoted must be exclusive of GST and inclusive of all other taxes, duties, cess, etc for performing scope of work. The GST applicable shall be shown separately.

Your Expression of interest along with budgetary offer for the above work should reach to the following address on or before 19.09.2024.

Address:

Office of Chief Mechanical Engineer,  
Room 315, Annex Administrative Building,  
Gandhidham, Kutch -370201.  
Email ID: [cme@deendayalport.gov.in](mailto:cme@deendayalport.gov.in), [see@deendayalport.gov.in](mailto:see@deendayalport.gov.in)

Yours faithfully,

Sd/-  
**Chief Mechanical Engineer**  
Deendayal Port Authority

## **DISCLAIMER**

The information in this document shared by the DPA (“Authority”) has been prepared to assist the applicants in preparing the non-binding EOI and it is clarified that:

- a) It does not constitute an invitation to offer or an offer in relation to the transaction.
- b) This document does not constitute any contract or agreement of any kind whatsoever.
- c) It shall not be assumed that there shall be no deviation or change in any of the information mentioned herein. While this document has been prepared in good faith, neither DPA nor any of their respective officers or employees or advisors or agents make any representation or warranty or shall have any responsibility or liability whatsoever in respect of any statements or omissions here from. Any liability is accordingly expressly disclaimed by DPA or any of their respective officers, employees, advisors or agents, whether negligent or otherwise.

**DEENDAYAL PORT AUTHORITY**  
**MECHANICAL ENGINEERING DEPARTMENT**

**Brief Summary**

Deendayal Port is situated on the West Coast of India, in the Gulf of Kutch and along the West Bank of Kandla Creek at 70° 13" E longitude and 23° 01" N Latitude. The Port was developed after Independence of India. It was commissioned in the year 1955 with 2 dry cargo berths and was declared a Major Port.

Presently the Port has fourteen cargo berths for handling dry cargo traffic, two berths for handling container cargo, seven oil jetties for handling POL products and other liquid cargo traffic at Kandla within Kandla Creek, one Offshore Terminal at Tekra for handling dry bulk cargo, and three Single Buoy Mooring (SBM) & Two products Jetties at Vadinar, in Jamnagar District, for handling crude oil. The container handling berth in Kandla has quay length of 545 meters and is equipped with 4 rail mounted quay cranes, 2 harbor mobile cranes, 8 rubber tyre gantry cranes and 4 reach stackers along with 24 nos. of tractor trailer. The present handling capacity of the terminal is 6 Lakhs TEU's per annum.

Presently, DPA in the light of increasing future demand for Dry bulk (including break bulk ) Clean Cargo handling facilities, and, in order to attract good volume of containerized cargo at Kandla and maintain cleanliness at the port as well, which would be better for the port in long term, envisage and proposes to undertake the 'Development, Operation & Maintenance of Berth No. 13 for Handling Multipurpose Clean Cargo including Container Cargo at Deendayal Port on DBFOT basis under PPP Mode.', for handling Multipurpose clean cargo viz., machinery (project cargo), Ro-Ro cargo, sugar, salt, wooden logs, silica sand, and containers for making it multipurpose berth on PPP mode allotting the berth to a single operator, at "as-is-where is" through DBFOT under Public-Private Partnership (PPP) mode.

The objective of the assignment is to develop Modern Multipurpose handling facility along with state-of-the-art equipment's for dry bulk (including break-bulk) and container handling at Deendayal port inside the port premises, and then to augment the business, operate and maintain the facility for the tenure of 30 years. The initiative will enable efficient handling of vessels, leading to their faster turnaround. The project involves Clean cargo handling equipment's viz., Container handling equipment's viz. RTGC, Reach Stackers, Spreaders, Dry bulk handling equipment's viz. Payloaders, Hitachi, Fork-lifts, Dumpers, trailers etc., along with development of storage yards, covered shed, Ancillary facilities like the additional Internal Road & rail Infrastructure, gate complex, electrification & lighting systems, toilet blocks, etc. to the required extent for Project. The existing facility like HMCs, equipment's, Quay, yard, buildings, electrical & utilities etc. shall be handed over to

the concessionaire on “as is where is” basis. Facility Planning has been undertaken in line with the anticipated market demand. Civil infrastructure and equipment are planned taking into account the latest developments in container ports worldwide. The envisaged total quay length is 300 meters, which can accommodate a single large vessel. The berth no. 13 is already under operations by Port Authority, whereas the approx. 21.7 Ha backup area shall be utilized for the storage yard, shed, office buildings and other allied infrastructure.

For the Project Development, Operation & Maintenance of Berth No.13 for handling Multipurpose Clean Cargo including Container Cargo at Deendayal Port on DBFOT basis under PPP mode, Deendayal Port Authority being Concessioneing Authority issued Letter of Award to Adani Ports and Special Economic Zone Limited (APSEZL), on 10.07.2024 for developing the project facilities for this Project. After signing of Concession Agreement and meeting with Condition Precedents of Concession Agreement by both the parties (Concessionaire and Concessioneing Authority), Concessioneing Authority will award Concession to M/s APSEZL. As per the Concession Agreement, the Concessionaire shall be responsible for Designing, Engineering, Installation, Financing, Procurement, Construction, Commissioning, Operation & Maintenance and Management of the Project and project facilities for a concession period of 30 years commencing from date of Award of Concession. The scheduled Construction period for development of Project facility shall be 15 months from Award of Concession. The Independent Engineer will supervise and monitor the compliance by the concessionaire with project requirement particularly during construction phase of project facilities.

## **BRIEF SCOPE OF WORK**

### **1. Scope of work:**

The scope of work for project to be carried out by the Independent Engineer is as under:

#### **1.1 Role and Functions of the Independent Engineer**

The role and functions of the Independent Engineer shall include the following:

- a. Review of the Drawings and Documents as set forth in Paragraph 4 of Appendix 7;
- b. Review, inspection and monitoring of Construction Works as set forth in Paragraph 5 of Appendix 7;
- c. Conducting Tests on completion of construction and issuing Completion/ Provisional Certificate as set forth in Paragraph 5 of Appendix 7;
- d. Review, inspection and monitoring of Concessionaire's obligations in Clause 18.2 and as set forth in Paragraph 7 of Appendix 7.
- e. Determining, as required under the Concession Agreement, the costs of any works or services and/or their reasonableness;
- f. Determining, as required under the Concession Agreement, the period or any extension thereof, for performing any duty or obligation;
- g. Assisting the Parties in resolution of Disputes as set forth in Paragraph 9 of Appendix 7;
- h. Undertaking all other duties and functions in accordance with the Concession Agreement.

1.2 The Independent Engineer shall discharge its duties in a fair, impartial and efficient manner, consistent with the highest standards of professional integrity and Good Industry Practice.

### **2. Development Period**

2.1 During the Development Period, the Independent Engineer shall undertake a detailed review of the Drawings to be furnished by the Concessionaire along with supporting data, including the geo-technical and hydrological investigations, characteristics of materials from borrow areas and quarry sites, topographical surveys and traffic surveys. The Independent Engineer shall complete such review and send its comments/observations to the Concessioning Authority and the Concessionaire within 21 (twenty-one) days

of receipt of such Drawings. In particular, such comments shall specify the conformity or otherwise of such Drawings with the Scope of the Project and specifications and standards.

- 2.2 The Independent Engineer shall review any modified Drawings or supporting documents sent to it by the Concessionaire and furnish its comments within 7 (seven) days of receiving such Drawings or Documents.
- 2.3 The Independent Engineer shall review the Drawings in accordance with Appendix-6 of Concession Agreement and furnish its comments thereon to the Concessioneing Authority and the Concessionaire within 7 (seven) days of receiving such Drawings.
- 2.4 The Independent Engineer shall review the detailed design, construction methodology, quality assurance procedures and the procurement, engineering and construction time schedule sent to it by the Concessionaire and furnish its comments within 15 (fifteen) days of receipt thereof.
- 2.5 Upon reference by the Concessioneing Authority, the Independent Engineer shall review and comment on the EPC Contract or any other contract for construction, operation and maintenance of the Project, and furnish its comments within 7 (seven) days from receipt of such reference from the Concessioneing Authority.

### **3. Construction Period**

- 3.1 In respect of the Drawings, Documents received by the Independent Engineer for its review and comments during the Construction Period, the provisions of Paragraph 4 of Appendix 7 shall apply, mutatis mutandis.
- 3.2 The Independent Engineer shall review the monthly progress report furnished by the Concessionaire and send its comments thereon to the Concessioneing Authority and the Concessionaire within 7 (seven) days of receipt of such report.
- 3.3 The Independent Engineer shall inspect the Construction Works once every month, preferably after receipt of the monthly progress report from the Concessionaire, but before the 20th (twentieth) day of each month in any case, and make out a report of such inspection (the "Inspection Report") setting forth an overview of the status, progress, quality and safety of construction, including the work methodology adopted, the materials used and their sources, and conformity of Construction Works with the Scope of the Project and the specifications and standards. In a separate section of the

Inspection Report, the Independent Engineer shall describe in reasonable detail the lapses, defects or deficiencies observed by it in the construction of the Project. The Independent Engineer shall send a copy of its Inspection Report to the Concessioneing Authority and the Concessionaire within 7 (seven) days of the inspection.

- 3.4 The Independent Engineer may inspect the project more than once in a month if any lapses, defects or deficiencies require such inspections.
- 3.5 For determining that the Construction Works conform to specifications and standards, the Independent Engineer shall require the Concessionaire to carry out, or cause to be carried out, tests on a sample basis, to be specified by the Independent Engineer in accordance with Good Industry Practice for quality assurance. For purposes of this Paragraph 3.5, the tests specified in the relevant Manuals specified by the Concessioneing Authority in relation to structures, buildings and equipment (the "Quality Control Manuals") or any modification/substitution thereof shall be deemed to be tests conforming to Good Industry Practice for quality assurance. The Independent Engineer shall issue necessary directions to the Concessionaire for ensuring that the tests are conducted in a fair and efficient manner, and shall monitor and review the results thereof.
- 3.6 The sample size of the tests, to be specified by the Independent Engineer under paragraph 3.5, shall comprise 10% of the quantity or number of tests prescribed for each category or type of tests in the Quality Control Manuals; provided that the Independent Engineer may, for reasons to be recorded in writing, increase the aforesaid sample size by up to 10% for certain categories or types of tests.
- 3.7 The timing of tests referred to in Paragraph 3.5, and the criteria for acceptance/ rejection of their results shall be determined by the Independent Engineer in accordance with the Quality Control Manuals. The tests shall be undertaken on a random sample basis and shall be in addition to, and independent of, the tests that may be carried out by the Concessionaire for its own quality assurance in accordance with Good Industry Practice.
- 3.8 In the event that the Concessionaire carries out any remedial works for removal or rectification of any defects or deficiencies, the Independent Engineer shall require the Concessionaire to carry out, or cause to be carried out, tests to determine that such remedial works have brought the Construction Works into conformity with the specifications and standards, and the provisions of this Paragraph 3 shall apply to such tests.

- 3.9 In the event that the Concessionaire fails to achieve any of the Project Milestones, the Independent Engineer shall undertake a review of the progress of construction and identify potential delays, if any. If the Independent Engineer shall determine that completion of the Project is not feasible within the time specified in the Concession Agreement, it shall require the Concessionaire to indicate within 15 (fifteen) days the steps proposed to be taken to expedite progress, and the period within which COD shall be achieved. Upon receipt of a report from the Concessionaire, the Independent Engineer shall review the same and send its comments to the Concessions Authority and the Concessionaire forthwith.
- 3.10 If at any time during the Construction Period, the Independent Engineer determines that the Concessionaire has not made adequate arrangements for the safety of workers and Users in the zone of construction or that any work is being carried out in a manner that threatens the safety of the workers and the Users, it shall make a recommendation to the Concessions Authority forthwith, identifying the whole or part of the Construction Works that should be suspended for ensuring safety in respect thereof.
- 3.11 In the event that the Concessionaire carries out any remedial measures to secure the safety of suspended works and Users, it may, by notice in writing, require the Independent Engineer to inspect such works, and within 3 (three) days of receiving such notice, the Independent Engineer shall inspect the suspended works and make a report to the Concessions Authority forthwith, recommending whether or not such suspension may be revoked by the Concessions Authority.
- 3.12 If suspension of Construction Works is for reasons not attributable to the Concessionaire, the Independent Engineer shall determine the extension of dates set forth in the Project Completion Schedule, to which the Concessionaire is reasonably entitled, and shall notify the Concessions Authority and the Concessionaire of the same.
- 3.13 The Independent Engineer shall carry out, or cause to be carried out, all the Tests specified in Appendix-7 and issue a Completion Certificate or Provisional Certificate, as the case may be. For carrying out its functions under this Paragraph 3.13 and all matters incidental thereto, the Independent Engineer shall act under and in accordance with the provisions of Clause 6.7 and Appendix-7 of Concession Agreement.
- 3.14 Upon reference from the Concessions Authority, the Independent Engineer shall make a fair and reasonable assessment of the costs of providing information, works and services as set forth in Clause 6.8 of Concession



Agreement and certify the reasonableness of such costs for payment by the Concessioneing Authority to the Concessionaire.

3.15 The Independent Engineer shall aid and advise the Concessionaire in preparing the maintenance manual.

#### **4. Termination**

4.1 At any time, not earlier than 90 (ninety) days prior to termination but not later than 15 (fifteen) days prior to such termination, the Independent Engineer shall, in the presence of a representative of the Concessionaire, inspect the Project for determining compliance by the Concessionaire with the requirements set forth in Clause 18.2 of Concession Agreement and, if required, cause tests to be carried out at the Concessionaire's cost for determining such compliance.

#### **5. Determination of costs and time**

5.1 The Independent Engineer shall determine the costs, and/or their reasonableness, that are required to be determined by it under the Concession Agreement.

5.2 The Independent Engineer shall determine the period, or any extension thereof, that is required to be determined by it under the Concession Agreement.

#### **6. Assistance in Dispute resolution**

6.1 When called upon by either Party in the event of any Dispute, the Independent Engineer shall mediate and assist the Parties in arriving at an amicable settlement.

6.2 In the event of any disagreement between the Parties regarding the meaning, scope and nature of Good Industry Practice, as set forth in any provision of the Concession Agreement, the Independent Engineer shall specify such meaning, scope and nature by issuing a reasoned written statement relying on good industry practice and authentic literature.

#### **7. Other duties and functions**

The Independent Engineer shall perform all other duties and functions specified in the Concession Agreement.

## **8. Miscellaneous**

- 8.1 The Independent Engineer shall notify its programme of inspection to the Concessioneing Authority and to the Concessionaire, who may, in their discretion, depute their respective representatives to be present during the inspection.
- 8.2 A copy of all communications, comments, instructions, Drawings or Documents sent by the Independent Engineer to the Concessionaire pursuant to this Scope of work, and a copy of all the test results with comments of the Independent Engineer thereon shall be furnished by the Independent Engineer to the Concessioneing Authority forthwith.
- 8.3 The Independent Engineer shall obtain, and the Concessionaire shall furnish in 2 (two) copies thereof, all communications and reports required to be submitted, under the Concession Agreement, by the Concessionaire to the Independent Engineer, whereupon the Independent Engineer shall send 1 (one) of the copies to the Concessioneing Authority along with its comments thereon.
- 8.4 The Independent Engineer shall retain at least one copy each of all Drawings and Documents received by it, including 'as-built' Drawings, and keep them in its safe custody.
- 8.5 Upon completion of its assignment hereunder, the Independent Engineer shall duly classify and list all Drawings, Documents, results of tests and other relevant records, and hand them over to the Concessioneing Authority or such other person as the Concessioneing Authority may specify, and obtain written receipt thereof. Two copies of the said documents shall also be furnished in their editable digital format or in such other medium or manner as may be acceptable to the Concessioneing Authority.
- 8.6 Wherever no period has been specified for delivery of services by the Independent Engineer, the Independent Engineer shall act with the efficiency and urgency necessary for discharging its functions in accordance with Good Industry Practice.

## **9. TESTS**

Depending on the parameters of the Project/Construction Requirements, the Tests shall be as per Good Industry Practice shall be stipulated on a project specific basis and listed as below.

- 1) All materials to be used, all methods to be adopted and all works performed shall be strictly in accordance with the relevant IS specification for the Project Requirement. The relevant specification for the safety and navigational aspects shall be referred for the type of tests and frequency of tests. For this purpose, the responsibility of the Concessionaire and their Contractor shall be as per the relevant provisions of the Concession Agreement.
- 2) The Concessionaire shall carry out quality control tests on the material and works at the frequency stipulated in the respective IS codes. The tests on equipment and machinery shall be ensured while its manufacturing and subsequent installation at site. In case of absence of clear indication of the frequency and type of tests the Good Industry Practice shall be used for testing with the approval of the Independent Engineer.
- 3) The Concessionaire shall carry out all necessary tests on materials and works independently and keep their records for reference. The Concessionaire shall prepare a quality audit manual in consultation with the Independent Engineer to ensure better quality of work.
- 4) The provisions of type and frequency of test in relevant IS codes are minimum. The Concessionaire shall conduct all possible tests to ensure quality construction and installation of equipment and machinery.
- 5) The Independent Engineer at its discretion and consistent with the sound engineering practices shall carry out any non-destructive test on completed works, structures, equipment and machinery and any other component to ascertain the soundness of the work.
- 6) Schedule of Test:**
  - (i). The Concessionaire shall submit a detailed inventory and particulars of all works and equipment and machinery forming part of the Concession Agreement.
  - (ii). The Concessionaire shall notify the Independent Engineer for its readiness for tests to be conducted.
- 7) Tests:**
  - (i). Visual and physical test: The Independent Engineer shall conduct a visual and physical check of the Project Requirements to determine that all works and equipment forming part thereof conform to the provisions of the Concession Agreement.

- (ii). **Test drive:** The Independent Engineer shall arrange for test drives of the movable equipment for the quality of service as per the relevant provisions of the IS codes for manufacture and testing of equipment and machinery.
- (iii). **Structural test:** All the equipment and machinery and structures shall be subjected to load test as the case may be for ascertaining safe working loads.
- (iv). **Environmental Audit:** The Independent Engineer shall carry out a check to determine conformity of the Project Requirements with the environment requirement set forth in Applicable Laws and Applicable Permits.
- (v). **Safety Review:** Safety audit of the Project Requirements shall have to be undertaken with the assistance of the relevant statutory authorities and determine conformity of the Project Requirements with the provisions of the Concession Agreement.
- (vi). **The procedures for tests:** The procedures as stipulated in the relevant IS specifications shall be adhered and the equipment for testing shall be arranged by the Concessionaire.

- 8) The Independent Engineer shall obtain a copy of operational and maintenance manuals of the Project Requirements from the Concessionaire and verify the contents of the manual in order to meet the following requirements:

The operation and maintenance manual shall essentially comprise of general requirement of O&M, O&M plans, replacement of maintenance parts, schedule of routine maintenance, schedule of preventive maintenance and periodic maintenance. The manual shall also cover the minimum maintenance requirement to adhere to the Performance Standards as per the provisions of the Concession Agreement. The manual shall generally cover the expected failures and time taken for repairs and maintenance.

- 9) The test procedure shall be followed as per ASTM, BIS, IS.
- 10) Test shall also satisfy the appropriate Authority and Certification:
  - (i). Dock safety Directorate
  - (ii). Environmental Authority
  - (iii). Director of Explosives

- (iv). Fire
- (v). Ground Water Authority
- (vi). Customs

### **11) Test of Handling Equipment & Electrification works**

The Concessionaire shall within a period of 45 (Forty-Five) days from the date of award of the concession shall submit to Independent Engineer a report highlighting type of tests that would require to be carried out as per the type of the equipment for the above-mentioned project.

Concessions Authority within 10 (ten) days of receipt of such document shall give their comments. The Concessionaire shall incorporate comments of the Concessions Authority and shall submit the revised document within 10 (ten) days of receipt of comments

### **10. Time Schedule:**

The scope of work shall be for the period commencing from date of award of concession to the date of expiry of 6 (Six) months from the date of commercial operation or extension thereof, if any, for project. In other words the time schedule for the Scope of work is 21 Months (tentative) from date award of concession or extension thereof if any.

### **11. General Terms & Conditions:**

The Budgetary Offer shall be for a period of 21 months from the date of award of Work.

Budgetary Offer

**Appointment of Independent Engineer for the work of " Development, Operation & Maintenance of Berth No.13 for handling Multipurpose Clean Cargo including Container Cargo at Deendayal Port on DBFOT basis under PPP mode for a Concession Period of 30 Years".**

Description	Amount	
	In figure	In words
Lump-sum charges including all taxes, duties for performing Scope of Work for the period of 21 months.  Note: The amount quoted shall be exclusive of Goods & Service Tax.		
<b>Total Rs.</b>		

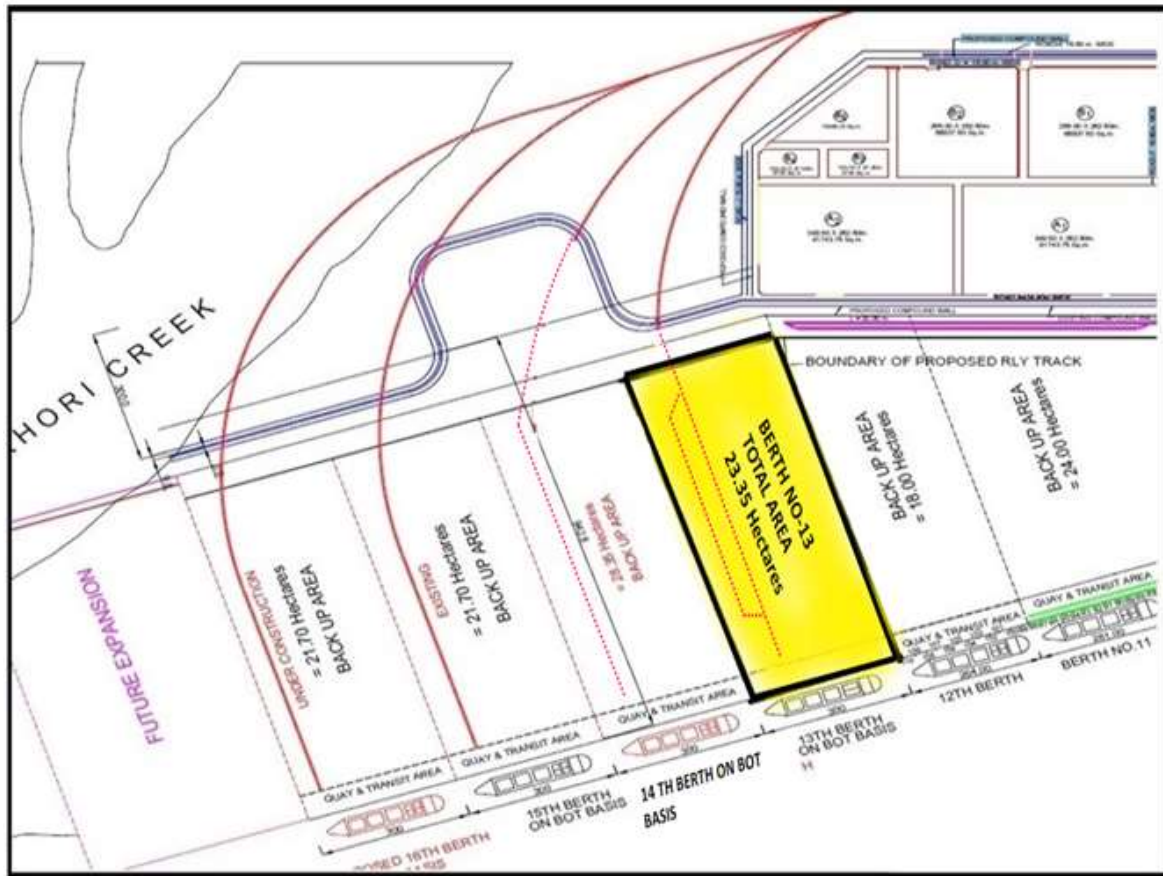
Signature with seal

Designation: \_\_\_\_\_

Place: \_\_\_\_\_

Date: \_\_\_\_\_

Layout Drawing of the Project Facility



**Extract of Concession Agreement****1.3 Interpretations**

This Agreement constitutes the entire understanding between the Parties regarding the Project and supersedes all previous written and/or oral representations and/or arrangements regarding the Project. If there is any aspect of the Project not covered by any of the provisions of this Agreement, then and only in that event, reference may be made by the Parties to the bid documents, *inter alia* including the RFP and RFQ documents, issued by the Concessions Authority and also including addendums, clarifications given in writing in the pre-bid meetings and the submissions of the Concessionaire, and the bid submitted by the Concessionaire but not otherwise. In case of any contradictions in the terms of this Agreement and any such other bid documents as referred to above, the terms of this Agreement shall prevail.

In this Agreement unless the context otherwise requires:

- a)** any reference to a statutory provision shall include such provision as is from time to time modified or re-enacted or consolidated so far as such modification or re-enactment or consolidation applies or is capable of applying to any transactions entered into hereunder;
- b)** the words importing singular shall include plural and vice versa, and words denoting natural persons shall include partnerships, firms, companies, corporations, joint ventures, trusts, associations, organisations or other entities (whether or not having a separate legal entity);
- c)** the table of contents and any headings in this Agreement are for ease of reference only and shall not affect the construction or interpretation of this Agreement;
- d)** the words “include” and “including” are to be construed without limitation;
- e)** references to “construction” include investigation, design, engineering, procurement, delivery, transportation, installation, processing, fabrication, testing, commissioning and other activities incidental to the construction;
- f)** any reference to any period of time shall mean a reference to that according to Indian Standard Time;
- g)** any reference to day shall mean a reference to a calendar day;



- h)** any reference to month shall mean a reference to a calendar month;
- i)** “Recital”, “Article” and “Appendix” shall refer, except where the context otherwise requires, to Articles of and any Appendix to this Agreement. The Appendices to this Agreement shall form an integral part and parcel of this Agreement and will be in full force and effect as though they were expressly set out in the body of this Agreement;
- j)** any reference at any time to any agreement, deed, instrument, license or document of any description shall be construed as reference to that agreement, deed, instrument, license or other document as amended, varied, supplemented, modified or novated at the time of such reference;
- k)** any agreement, consent, approval, authorization, notice, communication, information or report required under or pursuant to this Agreement from or by any Party or the Independent Engineer and/or a Statutory Auditor shall be valid and effectual only if it is in writing under the hands of duly authorized representative of such Party or the Independent Engineer and/or Statutory Auditor, as the case may be, in this behalf and not otherwise;
- l)** unless otherwise stated, any reference to any period commencing “from” a specified day or date and “till” or “until” a specified day or date shall include both such days or dates;
- m)** unless otherwise specified, any interest to be calculated and payable under this Agreement shall accrue on a Monthly basis and from the respective due dates as provided for in this Agreement;
- n)** the damages payable by either Party to the other of them, as set forth in this Agreement, whether on *per diem* basis or otherwise, are mutually agreed genuine pre-estimated loss and damage likely to be suffered and incurred by the Party entitled to receive the same and are not by way of penalty;
- o)** time shall be of the essence in the performance of the Parties’ respective obligations. If any time period specified herein is extended, such extended time shall also be of the essence;
- p)** The rule of construction, if any, that a contract should be interpreted against the parties responsible for the drafting and preparation thereof, shall not apply; and

q) any word or expression used in this Agreement, unless defined or construed in this Agreement, shall be construed as per the definition given in General Clauses Act, 1897 failing which it shall bear the ordinary English meaning.

#### **1.4 Measurements and Arithmetic Conventions**

All measurements and calculations shall be in metric system and calculations done to 2 decimal places, with the third digit of 5 or above being rounded up and below 5 being rounded down.

#### **1.5 Ambiguities and Discrepancies**

In case of ambiguities or discrepancies within this Agreement, the following shall apply:

- a) between two Articles of this Agreement, the provisions of specific Articles relevant to the issue under consideration shall prevail over those in other Articles;
- b) between the dimension scaled from the Design and Drawings and its specific written dimension, the latter shall prevail;
- c) between any value written in numerals and that in words, the latter shall prevail; and
- d) between the provisions of this Agreement and any other documents forming part of this Agreement, the former shall prevail.

#### **6.7 Issue of Completion Certificate**

a) At least 60 (sixty) Days prior to the likely completion of the Project, the Concessionaire shall notify the Independent Engineer of the date when it intends to commence commercial operations. The Independent Engineer shall then proceed to inspect the Construction Works with the intention of issuing the Completion Certificate and determine and notify to the Concessionaire the schedule and manner of the tests as are specified in Appendix 7 that it shall carry out to ensure that the Project meets with the Construction Standards (“**the Tests**”). The date and time of each of the Tests shall be determined by the Independent Engineer in consultation with the Concessionaire and notified to the Concessioneing Authority who may designate its representative to witness the Tests. The Concessionaire shall provide such assistance as the Independent Engineer may reasonably require for conducting the Tests. In the event of the Concessionaire and the Independent Engineer failing to mutually agree on the dates for conducting the Tests, the Concessionaire shall fix the dates by not less than 10 (ten) Days’ notice to the Independent Engineer;

b) All Tests shall be conducted in accordance with Appendix 7 at the cost and expense of the Concessionaire. The Independent Engineer shall observe, monitor and review the results of the Tests to determine compliance of the Project with specifications and standards and if it is reasonably anticipated or determined by the Independent Engineer during the course of any Test that the performance of the

Project or any part thereof does not meet the specifications and standards, it shall have the right to suspend or delay such Test and require the Concessionaire to remedy and rectify the defects or deficiencies. Upon completion of each Test, the Independent Engineer shall provide to the Concessionaire and the Concessioneing Authority copies of all Test data including detailed Test results. For the avoidance of doubt, it is expressly agreed that the Independent Engineer may require the Concessionaire to carry out or caused to be carried out additional Tests, in accordance with Good Industry Practice, for determining the compliance of the Project with specifications and standards.

c) Upon completion of Construction Works and the Independent Engineer determining all the Tests to be successful, it shall forthwith issue to the Concessionaire and the Concessioneing Authority a Completion Certificate.

d) The Independent Engineer may, at the request of the Concessionaire, issue a provisional certificate of completion (the “**Provisional Certificate**”) if the Tests are successful and the Project can be safely and reliably placed in commercial operation though certain works or things forming part thereof are outstanding and not yet complete. The Provisional Certificate shall have appended thereto a list of outstanding items signed jointly by the Independent Engineer and the Concessionaire (the “**Punch List**”) to be completed by the Concessionaire within a stipulated time. Upon completion of all Punch List items, the Independent Engineer shall conduct tests, if required and issue the Completion Certificate. All items in the Punch List shall be completed by the Concessionaire within 90 (ninety) Days of the date of issue of the Provisional Certificate or such other extended period that the Concessioneing Authority may in its sole discretion determine, failing which the Provisional Certificate shall lose its validity and the Concessioneing Authority shall be entitled to terminate this Agreement;

e) Without prejudice to the foregoing, if the Concessionaire shall have failed to complete any Construction Works on account of Force Majeure or for reasons solely attributable to the Concessioneing Authority, the Concessioneing Authority may, in its discretion, reduce the scope of Project and the Total Project Cost will be reduced to the same extent. Upon such reduction of Total Project Cost, the obligations of the Concessionaire in respect of such works shall be deemed to have been fulfilled.

## **6.8 Change of Scope**

a) The Concessioneing Authority may, notwithstanding anything to the contrary contained in this Agreement, require the provision of additional works and services which are not included in the scope of the Project as contemplated by this Agreement (“**Change of Scope**”). Provided no such Change of Scope shall be made in the Construction Phase if it is in the reasonable judgment of the parties hereto likely to delay the completion of the Project such that the Project cannot be completed on the Scheduled Project Completion Date. Provided further, the cost of implementing a single Change of Scope shall not exceed a sum corresponding to 5%

of the Total Project Cost and during the Concession Period the cumulative cost of implementing orders pertaining to Change of Scope shall not exceed a sum corresponding to 20% of the Total Project Cost ;

**b)** If the Concessioneing Authority determines that a Change of Scope is necessary, it shall issue to the Concessionaire a notice specifying in reasonable detail the works and services contemplated thereunder (the **“Change of Scope Notice”**);

**c)** Upon receipt of a Change of Scope Notice, the Concessionaire shall, provide to the Concessioneing Authority, the following:

- i. the adverse impact, if any, which the Change of Scope is likely to have on the Project; and
- ii. the cost to be incurred by the Concessionaire for and in respect of such Change of Scope;

**d)** Upon receipt of the foregoing information, the Concessioneing Authority shall, if it decides to proceed with the Change of Scope, convey its agreement or otherwise of the assessment of the Concessionaire. If the Concessionaire does not notify any adverse impact of a Change of Scope notified under the Change of Scope Notice within 30 (thirty) Days of the date thereof and/or the Concessioneing Authority does not disagree with the cost assessment of the Concessionaire, the Concessioneing Authority shall issue an order requiring the Concessionaire to proceed with the implementation of such Change of Scope. If an adverse impact is notified by the Concessionaire and/or the Concessioneing Authority disagrees with the cost assessment, the Parties shall in good faith modify the Change of Scope envisaged so as to remove the adverse impact/agree to the cost implication for carrying out the Change of Scope within a period of 30 (thirty) Days of notification of the adverse impact/cost. In the event that the Parties are unable to mutually agree to a Change of Scope and/or the cost of implementing the same, they may seek intervention of the Independent Engineer to resolve the differences and upon the final determination of the desired Change of Scope and its cost implication, the Concessioneing Authority may issue an order to implement the Change of Scope;

**e)** The provisions of this Agreement, insofar as they relate to Construction Works and Tests, shall apply mutatis mutandis to the works undertaken by the Concessionaire in respect of a Change of Scope;

**f)** Within 7 (seven) Days of an order for Change of Scope being issued, the Concessioneing Authority shall make an advance payment to the Concessionaire of a sum equal to 20% of the cost of Change of Scope as agreed hereunder. The Concessionaire shall, after commencement of work, present to the Concessioneing Authority bills for payment in respect of the works in progress or completed works, as the case may be, supported by such documentation as is reasonably sufficient for the Concessioneing Authority to determine the accuracy thereof. Within 30 (thirty) Days of receipt of such bills, the Concessioneing Authority shall disburse to the Concessionaire after deducting Pro-rata advance payment, such amounts as are certified by the Statutory Auditors as being expended by the Concessionaire for and

in respect of implementing Construction Works or procuring equipment following an order for a Change of Scope;

**g)** Notwithstanding anything to the contrary contained in this Article 6.8, the Concessions Authority may, after giving the Change of Scope Notice to the Concessionaire and considering its reply thereto, decide to seek competitive bids for carrying out the works envisaged in a Change of Scope; provided that the Concessionaire shall have the option of matching the first ranked bid in terms of the selection criteria, subject to payment of 2% of the bid amount to the Concessions Authority, and thereupon securing the award of such works or services. For the avoidance of doubt, it is agreed that the Concessionaire shall be entitled to exercise such option only if it has participated in the bidding process and its bid does not exceed the first ranked bid by more than 10% thereof; It is also agreed that the Concessionaire shall provide access, assistance and cooperation to the person who undertakes the works or services hereunder. For the avoidance of doubt, the Concessions Authority acknowledges and agrees that it shall not undertake any works or services under this Clause 6.8 (g) if such works or services cause a Material Adverse Effect on the Concessionaire.

**h)** If during the pendency of the Agreement, the Concessionaire determines at any time that a Change of Scope is necessary for providing safer and/or improved Project Facilities and Services, it shall by notice in writing request the Concessions Authority to consider such Change of Scope. The Concessions Authority shall respond within 45 (forty-five) days of receipt of such notice, either accepting such Change of Scope with modifications, if any, or inform the Concessionaire in writing of its reasons for not accepting such Change of Scope. The Concessionaire may implement the Project and provide Project Facilities and Services in accordance with the Change of Scope as may be approved in writing by the Concessions Authority and all the provisions of this Article 6 for the Project Implementation shall mutatis mutandis apply. Provided, it is clarified that the provisions contained in Article 6.8. (f) and (g) shall not apply to a Change of Scope required by the Concessionaire.

## **18.2 Concessionaire's Obligations**

The Concessionaire shall;

**a)** hand over peaceful possession of the Project Site, Port's Assets, the Project and the Project Facilities and Services free of Encumbrance;

**b)** transfer all its rights, titles and interests in the assets comprised in the Project Facilities and Services which are required to be transferred to the Concessions Authority in accordance with this Agreement and execute such deeds and documents as may be necessary for the purpose and complete all legal or other formalities required in this regard;

**c)** hand over to the Concessions Authority all documents including as built drawings, manuals and records relating to operation and maintenance of the Project Facilities and Services;

- d)** transfer technology and up-to-date know-how relating to operation and maintenance of the Port's Assets and/or the Project Facilities and Services;
- e)** transfer or cause to be transferred to the Concessions Authority any Project Contracts which are (i) valid and subsisting; (ii) capable of being transferred to the Concessions Authority; and (iii) those the Concessions Authority has chosen to take over, and cancel or cause to be cancelled such Project Contracts not transferred to the Concessions Authority. For this purpose, the Concessionaire shall ensure that all Project Contracts are assignable in favor of the Concessions Authority without any further action on part of the respective counterparties. The Concessionaire shall entirely at its cost, terminate all such Project Contracts which are not transferred/assigned and/or are not required to be transferred/assigned to the Concessions Authority;
- f)** at its cost, transfer to the Concessions Authority all such Applicable Permits which the Concessions Authority may require, and which can be legally transferred. Provided if the termination is on account of Concessions Authority Event of Default the cost of such transfer shall be borne/ reimbursed by the Concessions Authority;
- g)** at its cost, remove within 90 (ninety) days from expiry of the Concession Period, from the Project Site/Port's Assets, any moveable assets that are not taken over by or not to be transferred to the Concessions Authority in terms of the provisions of this Agreement.

## APPENDIX 6

### DESIGNS AND DRAWINGS

Concessionaire shall prepare Designs & Drawings for the following items but not limited to:

- A. Civil and Structural Work: -
  - (i). Layout plans of Project Facilities and Services.
  - (ii). Detailed structural drawings for all project facilities inter alia for the components of the Project Facilities like Civil & Structural Works, Development of Back up area, Road and Railway Network, Allied facilities, etc.
- B. Handling Equipment
- C. Electric Work
  - (i). Single Line Diagram for all the electrical installations at the Berth and Allied Facilities
- D. Fire Fighting Facility
  - (i). Detailed Layout plan for FSE not limited to Fire Hydrants, Fire Alarms, Sprinkler system across the facility.
  - (ii). HAZOP for the entire facility to be discussed and finalized with the Concessioning Authority in accordance with the stipulated guidelines

The Concessionaire shall also prepare detailed report on analysis and structural design of Project Facilities & Services along with the aforementioned Designs & Drawings.

The Concessionaire shall within a period of 45 (Forty-Five) days from date of the award of concession shall prepare aforementioned Designs & Drawings and report on analysis and structural design of Project Facilities and Services. The Concessionaire shall submit the same for review to the Independent Engineer and Concessioning Authority.

Independent Engineer after taking into account Concessioning Authority's comment shall send its comment to the Concessionaire.

Concessionaire shall incorporate comments of the Independent Engineer wherever feasible to conform to the Construction Standards.

## APPENDIX 7

### TERMS OF REFERENCE FOR INDEPENDENT ENGINEER

#### 1. Scope

1.1 These Terms of Reference for the Independent Engineer (the “**TOR**”) are being specified pursuant to the Concession Agreement dated (the “**Agreement**”), which has been entered into between the Authority and (the “**Concessionaire**”) for the Project at **Development, Operation & Maintenance of Berth No. 13 for Handling Multipurpose Clean Cargo including Container Cargo at Deendayal Port on DBFOT basis under PPP Mode** , and a copy of which is annexed hereto and marked as Annex-A to form part of this TOR.

1.2 This TOR shall apply to construction, operation and maintenance of the Project.

#### 2. Definitions and interpretation

2.1 The words and expressions beginning with or in capital letters used in this TOR and not defined herein but defined in the Agreement shall have, unless repugnant to the context, the meaning respectively assigned to them in the Agreement

2.2 References to Articles, Clauses and Appendix in this TOR shall, except where the context otherwise requires, be deemed to be references to the Articles, Clauses and Appendix of the Agreement, and references to Paragraphs shall be deemed to be references to Paragraphs of this TOR.

2.3 The rules of interpretation stated in Clauses 1.3, 1.4 and 1.5 of the Agreement shall apply, *mutatis mutandis*, to this TOR.

#### 3. Role and functions of the Independent Engineer

3.1 The role and functions of the Independent Engineer shall include the following:

- a. review of the Drawings and Documents as set forth in Paragraph 4;
- b. review, inspection and monitoring of Construction Works as set forth in Paragraph 5;
- c. conducting Tests on completion of construction and issuing Completion/ Provisional Certificate as set forth in Paragraph 5;
- d. review, inspection and monitoring of operation and maintenance as set forth in Paragraph 6;
- e. review, inspection and monitoring of Concessionaire’s obligations in Clause 18.2 and as set forth in Paragraph 7.
- f. determining, as required under the Agreement, the costs of any works or services and/or their reasonableness;



- g. determining, as required under the Agreement, the period or any extension thereof, for performing any duty or obligation;
- h. assisting the Parties in resolution of Disputes as set forth in Paragraph 9; and
- i. Undertaking all other duties and functions in accordance with the Agreement.

3.2 The Independent Engineer shall discharge its duties in a fair, impartial and efficient manner, consistent with the highest standards of professional integrity and Good Industry Practice.

#### **4. Development Period**

4.1 During the Development Period, the Independent Engineer shall undertake a detailed review of the Drawings to be furnished by the Concessionaire along with supporting data, including the geo-technical and hydrological investigations, characteristics of materials from borrow areas and quarry sites, topographical surveys and traffic surveys. The Independent Engineer shall complete such review and send its comments/observations to the Concessions Authority and the Concessionaire within 21 (twenty-one) days of receipt of such Drawings. In particular, such comments shall specify the conformity or otherwise of such Drawings with the Scope of the Project and specifications and standards.

4.2 The Independent Engineer shall review any modified Drawings or supporting documents sent to it by the Concessionaire and furnish its comments within 7 (seven) days of receiving such Drawings or Documents.

4.3 The Independent Engineer shall review the Drawings in accordance with Appendix-6 and furnish its comments thereon to the Concessions Authority and the Concessionaire within 7 (seven) days of receiving such Drawings.

4.4 The Independent Engineer shall review the detailed design, construction methodology, quality assurance procedures and the procurement, engineering and construction time schedule sent to it by the Concessionaire and furnish its comments within 15 (fifteen) days of receipt thereof.

4.5 Upon reference by the Concessions Authority, the Independent Engineer shall review and comment on the EPC Contract or any other contract for construction, operation and maintenance of the Project, and furnish its comments within 7 (seven) days from receipt of such reference from the Concessions Authority.

#### **5. Construction Period**

5.1 In respect of the Drawings, Documents received by the Independent Engineer for its review and comments during the Construction Period, the provisions of Paragraph 4 shall apply, *mutatis mutandis*.

5.2 The Independent Engineer shall review the monthly progress report furnished by the Concessionaire and send its comments thereon to the Concessions Authority and the Concessionaire within 7 (seven) days of receipt of such report.

5.3 The Independent Engineer shall inspect the Construction Works once every month, preferably after receipt of the monthly progress report from the Concessionaire, but before the 20<sup>th</sup> (twentieth) day of each month in any case, and make out a report of such inspection (the "Inspection Report") setting forth an overview of the status, progress, quality and safety of construction, including the work methodology adopted, the materials used and their sources, and conformity of Construction Works with the Scope of the Project and the specifications and standards. In a separate section of the Inspection Report, the Independent Engineer shall describe in reasonable detail the lapses, defects or deficiencies observed by it in the construction of the Project. The Independent Engineer shall send a copy of its Inspection Report to the Concessioneing Authority and the Concessionaire within 7 (seven) days of the inspection.

5.4 The Independent Engineer may inspect the project more than once in a month if any lapses, defects or deficiencies require such inspections.

5.5 For determining that the Construction Works conform to specifications and standards, the Independent Engineer shall require the Concessionaire to carry out, or cause to be carried out, tests on a sample basis, to be specified by the Independent Engineer in accordance with Good Industry Practice for quality assurance. For purposes of this Paragraph 5.5, the tests specified in the relevant Manuals specified by the Concessioneing Authority in relation to structures, buildings and equipment (the "Quality Control Manuals") or any modification/substitution thereof shall be deemed to be tests conforming to Good Industry Practice for quality assurance. The Independent Engineer shall issue necessary directions to the Concessionaire for ensuring that the tests are conducted in a fair and efficient manner, and shall monitor and review the results thereof.

5.6 The sample size of the tests, to be specified by the Independent Engineer under paragraph 5.5, shall comprise 10% of the quantity or number of tests prescribed for each category or type of tests in the Quality Control Manuals; provided that the Independent Engineer may, for reasons to be recorded in writing, increase the aforesaid sample size by up to 10% for certain categories or types of tests.

5.7 The timing of tests referred to in Paragraph 5.5, and the criteria for acceptance/ rejection of their results shall be determined by the Independent Engineer in accordance with the Quality Control Manuals. The tests shall be undertaken on a random sample basis and shall be in addition to, and independent of, the tests that may be carried out by the Concessionaire for its own quality assurance in accordance with Good Industry Practice.

5.8 In the event that the Concessionaire carries out any remedial works for removal or rectification of any defects or deficiencies, the Independent Engineer shall require the Concessionaire to carry out, or cause to be carried out, tests to determine that such remedial works have brought the Construction Works into conformity with the specifications and standards, and the provisions of this Paragraph 5 shall apply to such tests.

5.9 In the event that the Concessionaire fails to achieve any of the Project Milestones, the Independent Engineer shall undertake a review of the progress of construction and identify potential delays, if any. If the Independent Engineer shall determine that completion of the Project is not feasible within the time specified in the Agreement, it shall require the Concessionaire to indicate within 15 (fifteen) days the steps proposed to be taken to expedite progress, and the period within which COD shall be achieved. Upon receipt of a report from the Concessionaire, the Independent Engineer shall review the same and send its comments to the Concessions Authority and the Concessionaire forthwith.

5.10 If at any time during the Construction Period, the Independent Engineer determines that the Concessionaire has not made adequate arrangements for the safety of workers and Users in the zone of construction or that any work is being carried out in a manner that threatens the safety of the workers and the Users, it shall make a recommendation to the Concessions Authority forthwith, identifying the whole or part of the Construction Works that should be suspended for ensuring safety in respect thereof.

5.11 In the event that the Concessionaire carries out any remedial measures to secure the safety of suspended works and Users, it may, by notice in writing, require the Independent Engineer to inspect such works, and within 3 (three) days of receiving such notice, the Independent Engineer shall inspect the suspended works and make a report to the Concessions Authority forthwith, recommending whether or not such suspension may be revoked by the Concessions Authority.

5.12 If suspension of Construction Works is for reasons not attributable to the Concessionaire, the Independent Engineer shall determine the extension of dates set forth in the Project Completion Schedule, to which the Concessionaire is reasonably entitled, and shall notify the Concessions Authority and the Concessionaire of the same.

5.13 The Independent Engineer shall carry out, or cause to be carried out, all the Tests specified in this Appendix-7 and issue a Completion Certificate or Provisional Certificate, as the case may be. For carrying out its functions under this Paragraph 5.13 and all matters incidental thereto, the Independent Engineer shall act under and in accordance with the provisions of Clause 6.7 and this Appendix-7.

5.14 Upon reference from the Concessions Authority, the Independent Engineer shall make a fair and reasonable assessment of the costs of providing information, works and services as set forth in Clause 6.8 and certify the reasonableness of such costs for payment by the Concessions Authority to the Concessionaire.

5.15 The Independent Engineer shall aid and advise the Concessionaire in preparing the maintenance manual.

## **6. Operation Period**

6.1 In respect of the Drawings, Documents and Safety Standards received by the Independent Engineer for its review and comments during the Operation Period, the provisions of Paragraph 4 shall apply, *mutatis mutandis*.

6.2 The Independent Engineer shall review the monthly report on cargo traffic, unit gross output/ discharge rates at berth, daily output rated per vessel, Tariff earned and collected in respect of Project Facilities and Services furnished by the Concessionaire and send its comments thereon to the Concessioneing Authority and the Concessionaire within 7 (seven) days of receipt of such report.

6.3 The Independent Engineer shall inspect the Project, once every year, before the 20<sup>th</sup> (twentieth) day of any month, and make out an operation and maintenance inspection report setting forth an overview of the status, quality and safety of operation and maintenance including its conformity with the key performance indicators, maintenance requirements and Safety Standards. In a separate section of the operation and maintenance inspection report, the Independent Engineer shall describe in reasonable detail the lapses, defects or deficiencies observed by it in operation and maintenance of the Project. The Independent Engineer shall send a copy of its operation and maintenance inspection report to the Concessioneing Authority and the Concessionaire within 7 (seven) days of the inspection.

6.4 The Independent Engineer may inspect the Project more than once in a year, if any lapses, defects or deficiencies require such inspections.

6.5 The Independent Engineer shall in its operation and maintenance inspection report specify the tests, if any, that the Concessionaire shall carry out, or cause to be carried out, for the purpose of determining that the Project is in conformity with the maintenance requirements. It shall monitor and review the results of such tests and the remedial measures, if any, taken by the Concessionaire in this behalf.

6.6 The Independent Engineer shall determine if any delay has occurred in completion of repair or remedial works in accordance with the Agreement, and shall also determine the damages, if any, payable by the Concessionaire to the Concessioneing Authority for such delay.

## **7. Termination**

7.1 At any time, not earlier than 90 (ninety) days prior to termination but not later than 15 (fifteen) days prior to such termination, the Independent Engineer shall, in the presence of a representative of the Concessionaire, inspect the Project for determining compliance by the Concessionaire with the requirements set forth in Clause 18.2 and, if required, cause tests to be carried out at the Concessionaire's cost for determining such compliance.

## **8. Determination of costs and time**

8.1 The Independent Engineer shall determine the costs, and/or their reasonableness, that are required to be determined by it under the Agreement.

8.2 The Independent Engineer shall determine the period, or any extension thereof, that is required to be determined by it under the Agreement.

## **9. Assistance in Dispute resolution**

9.1 When called upon by either Party in the event of any Dispute, the Independent Engineer shall mediate and assist the Parties in arriving at an amicable settlement.

9.2 In the event of any disagreement between the Parties regarding the meaning, scope and nature of Good Industry Practice, as set forth in any provision of the Agreement, the Independent Engineer shall specify such meaning, scope and nature by issuing a reasoned written statement relying on good industry practice and authentic literature.

## **10 Other duties and functions**

The Independent Engineer shall perform all other duties and functions specified in the Agreement.

## **11 Miscellaneous**

11.1 The Independent Engineer shall notify its programme of inspection to the Concessions Authority and to the Concessionaire, who may, in their discretion, depute their respective representatives to be present during the inspection.

11.2 A copy of all communications, comments, instructions, Drawings or Documents sent by the Independent Engineer to the Concessionaire pursuant to this TOR, and a copy of all the test results with comments of the Independent Engineer thereon shall be furnished by the Independent Engineer to the Concessions Authority forthwith.

11.3 The Independent Engineer shall obtain, and the Concessionaire shall furnish in 2 (two) copies thereof, all communications and reports required to be submitted, under this Agreement, by the Concessionaire to the Independent Engineer, whereupon the Independent Engineer shall send 1 (one) of the copies to the Concessions Authority along with its comments thereon.

11.4 The Independent Engineer shall retain at least one copy each of all Drawings and Documents received by it, including 'as-built' Drawings, and keep them in its safe custody.

11.5 Upon completion of its assignment hereunder, the Independent Engineer shall duly classify and list all Drawings, Documents, results of tests and other relevant records, and hand them over to the Concessions Authority or such other person as the Concessions Authority may specify, and obtain written receipt thereof. Two copies of the said documents shall also be furnished in their editable digital format or in such other medium or manner as may be acceptable to the Concessions Authority.

11.6 Wherever no period has been specified for delivery of services by the Independent Engineer, the Independent Engineer shall act with the efficiency and urgency necessary for discharging its functions in accordance with Good Industry Practice.

## **Annexure**

### **TESTS**

Depending on the parameters of the Project/Construction Requirements, the Tests shall be as per Good Industry Practice shall be stipulated on a project specific basis and listed in this Annexure.

1) All materials to be used, all methods to be adopted and all works performed shall be strictly in accordance with the relevant IS specification for the Project Requirement. The relevant specification for the safety and navigational aspects shall be referred for the type of tests and frequency of tests. For this purpose, the responsibility of the Concessionaire and their Contractor shall be as per the relevant provisions of this Agreement.

2) The Concessionaire shall carry out quality control tests on the material and works at the frequency stipulated in the respective IS codes. The tests on equipment and machinery shall be ensured while its manufacturing and subsequent installation at site. In case of absence of clear indication of the frequency and type of tests the Good Industry Practice shall be used for testing with the approval of the Independent Engineer.

3) The Concessionaire shall carry out all necessary tests on materials and works independently and keep their records for reference. The Concessionaire shall prepare a quality audit manual in consultation with the Independent Engineer to ensure better quality of work.

4) The provisions of type and frequency of test in relevant IS codes are minimum. The Concessionaire shall conduct all possible tests to ensure quality construction and installation of equipment and machinery.

5) The Independent Engineer at its discretion and consistent with the sound engineering practices shall carry out any non-destructive test on completed works, structures, equipment and machinery and any other component to ascertain the soundness of the work.

6) Schedule of Test:

(i). The Concessionaire shall submit a detailed inventory and particulars of all works and equipment and machinery forming part of this Agreement.

(ii). The Concessionaire shall notify the Independent Engineer for its readiness for tests to be conducted.

- 7) Tests:
- (i). Visual and physical test: The Independent Engineer shall conduct a visual and physical check of the Project Requirements to determine that all works and equipment forming part thereof conform to the provisions of this Agreement.
  - (ii). Test drive: The Independent Engineer shall arrange for test drives of the movable equipment for the quality of service as per the relevant provisions of the IS codes for manufacture and testing of equipment and machinery.
  - (iii). Structural test: All the equipment and machinery and structures shall be subjected to load test as the case may be for ascertaining safe working loads.
  - (iv). Environmental Audit: The Independent Engineer shall carry out a check to determine conformity of the Project Requirements with the environment requirement set forth in Applicable Laws and Applicable Permits.
  - (v). Safety Review: Safety audit of the Project Requirements shall have to be undertaken with the assistance of the relevant statutory authorities and determine conformity of the Project Requirements with the provisions of the Agreement.
  - (vi). The procedures for tests: The procedures as stipulated in the relevant IS specifications shall be adhered and the equipment for testing shall be arranged by the Concessionaire.

8) The Independent Engineer shall obtain a copy of operational and maintenance manuals of the Project Requirements from the Concessionaire and verify the contents of the manual in order to meet the following requirements:

The operation and maintenance manual shall essentially comprise of general requirement of O&M, O&M plans, replacement of maintenance parts, schedule of routine maintenance, schedule of preventive maintenance and periodic maintenance. The manual shall also cover the minimum maintenance requirement to adhere to the Performance Standards as per the provisions of this Agreement. The manual shall generally cover the expected failures and time taken for repairs and maintenance.

9) The test procedure shall be followed as per ASTM, BIS, IS.

10) Test shall also satisfy the appropriate Authority and Certification:

- (i). Dock safety Directorate
- (ii). Environmental Authority
- (iii). Director of Explosives
- (iv). Fire
- (v). Ground Water Authority
- (vi). Customs

11) Test of Handling Equipment & Electrification works

The Concessionaire shall within a period of 45 (Forty-Five) days from the date of award of the concession shall submit to Independent Engineer a report highlighting type of tests that would require to be carried out as per the type of the equipment for the above-mentioned project.

The Concessioneing Authority within 10 (ten) days of receipt of such document shall give their comments.

The Concessionaire shall incorporate comments of the Concessioneing Authority and shall submit the revised document within 10 (ten) days of receipt of comments.